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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/800,010	03/15/2004	Minoru Kuniyoshi	038788.53357US	6813	
29911 7590 GM442098 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP			EXAM	EXAMINER	
			DEHGHAN, QUEENIE S		
	P.O. BOX 14300 WASHINGTON, DC 20044-4300		ART UNIT	PAPER NUMBER	
			1791		
			MAIL DATE	DELIVERY MODE	
			03/14/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/800.010 KUNIYOSHI ET AL. Office Action Summary Examiner Art Unit Queenie Dehghan 1791 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 02 November 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.2.4 and 23-26 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1.2.4 and 23-26 is/are rejected. 7) Claim(s) 1 is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date \_

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

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#### DETAILED ACTION

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on November 2, 2007 and December 19, 2007 have been entered.

### Claim Objections

 Claim 1 is objected to because of the following informalities: "comprising at least the three" is grammatically incorrect. Appropriate correction is required.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Inoue et al. (5,608,123). Inoue discloses a process for producing a hybrid glassy material comprising producing a gel body by a sol-gel method using phenyltriethoxysilane as the sol-gel raw material and heating the gel body to a temperature of 120°C for 6 hours (col. 11 line 59 to col. 12 line 12), wherein this heating effectively melts the gel body and ages the melt, since the temperature and duration of the heating step similarly performed by the applicant as recited in the disclosure of the application.
- 7. Claims 23-26 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Inoue et al. (5,608,123) in views of Niida et al. (Journal of Non-Crystalline Solids 306 (2002) 292-299). Inoue discloses a process for producing a hybrid glassy material comprising producing a gel body by a sol-gel method using phenyltriethoxysilane as the sol-gel raw material and heating the gel body to a temperature of 120°C for 6 hours (col. 11 line 59 to col. 12 line 12), wherein this heating effectively melts the gel body and

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ages the melt, since the temperature and duration of the heating step similarly performed by the applicant as recited in the disclosure of the application. Inoue also teaches mixing a gel with other substances to create a mixture and subsequently heating the mixture for 4 hrs. at  $100^{\circ}$ C (col. 13 line61 to col. 14 lie 19). Niida et al. teach a precursor substance for low melting glass, obtained by a non-aqueous acid-base reaction method comprising Me<sub>2</sub>SiO, P<sub>2</sub>0<sub>5</sub>, and SnO (abstract). It would have been obvious to one of ordinary skill in the art at time of the invention to utilize the low melting glass of Niida et al. as a suitable addition to the mixture of Inoue et al. in order achieve a low melting glass.

## Response to Arguments

8. Applicant's arguments, filed November 2, 2007, with respect to the rejection(s) of claim(s) 1 and 23 under Kawabe have been fully considered and are persuasive.
Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Inoue et al.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Queenie Dehghan whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 9:00am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven P. Griffin/ Supervisory Patent Examiner, Art Unit 1791

Q Dehghan